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10/824,969	04/15/2004	Brian D. Harry	307341.01	7457
47973 7590 09/09/2009 WORKMAN NYDEGGER/MICROSOFT 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CITY, UT 84111				
EXAMINER				
TECKLU, ISAAC TUKU				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,969

Applicant(s)

HARRY ET AL.

Examiner

ISAAC T. TECKLU

Art Unit

2192

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,9,11-15,17,20,21 and 28-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8,9,11-15,17,20,21 and 28-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 3-6, 8-9, 11-15, 17, 20-21, 28-37 have been examined.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/10/2009 has been entered.

Response to Arguments

3. Applicant's arguments filed 12/29/2008 have been fully considered but they are not persuasive.

Argument:

“ Lin fails to anticipate a system or method for source code control, as claimed. For example, Lin fails to anticipate a client workspace that enables a user to checkout and modify a source code file, as well as a separate file cache for storing the source code file in an unmodified state while the user modifies the check-out file in the client workspace. For at least the foregoing reasons, independent claims 1, 21 and 28 are not anticipated by Lin” (Remark pp. 12 of 13).

Response:

The Examiner strongly disagrees with the above assertion. Lin teaches a client workspace that enables a user to checkout and modify a source code file, as well as a separate file cache for storing the source code file in an unmodified state while the user modifies the check-out file in the

client workspace (see for example [0008] "... the files to be cached to the local data store...", paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0034] paragraph [0043] "... store them on a list...", [0045] "... while offline the CSC component can check the file access and share access rights...", [0071] "... op-lock is granted to the client...", paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ...", and e.g. FIG. 2, 236 and related text, paragraph [0325], paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ..."and e.g. FIG. 12, step 1210 and related text). Thus, it is respectfully submitted that the above argument is not persuasive. Accordingly, the rejection has been maintained as set forth in the Office Action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-6, 8-9, 11-15, 17, 20-21, 28-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Lin et al. (US 2005/0091226 A1).

Per claim 1 (Currently Amended), Lin discloses a client system that facilitates source code control, comprising: a processor; and one or more physical computer readable storage media operatively coupled to the processor, the computer-readable storage media having stored thereon computer executable instructions that when executed by the processor (e.g. FIG. 1 and related text), are configured to implement the client system, including a client-side workspace that stores at least one source code file downloaded from a server-side source control repository (paragraph [0007] “... local client ... data store...”, [0043] “... store them on a list...” and paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ...” and e.g. FIG. 2, 236 and related text), the client workspace enabling a user of the client system to checkout the source code file for modification by the user and to store the source code file when modified (paragraph [0043] “... store them on a list...”, [0045] “... while offline the CSC component can check the file access and share access rights...”, [0071] “... op-lock is granted to the client...” and paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ...” and e.g. FIG. 2, 236 and related text);

a client-side client source code control component that tracks an activity associated with a modification of the source code file in the client workplace when the client is in an offline mode, the client source code control component comprising: a file cache that stores the source code file in an unmodified state as a pristine copy (paragraph [0007] “... online-offline...”, [0008] “... the files to be cached to the local data store...”, paragraph [0012] “... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ...” and paragraph [0034], paragraph [0084] “...

user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ...” and paragraph [0325] “... and e.g. FIG. 12, step 1210 and related text), and transmits the activity during an update process when the client moves to an online mode and (e.g. FIG. 12, step 1230 and related text); and

an activity list that stores the activity, the activity comprising one or more commands executed against the source code file during the offline mode (see at least paragraph [0010] “... file access parameters including read/write capabilities can also be cached for offline use...” and e.g. FIG. 5 and related text) and associated with the modification; and wherein the client-side source code control component is configured to interface with (paragraph [0007] “... online-offline...” and paragraph [0012] “... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ...” and paragraph [0034], paragraph [0084] “... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ...” and paragraph [0325] “... and e.g. FIG. 12, step 1210 and related text), and transmits the activity during an update process when the client moves to an online mode and (e.g. FIG. 12, step 1230 and related text) a server-side server source code control component to facilitate transfer of the activity (paragraph [0329] “... client side caching ...” and e.g. FIG. 1 and 8-10 and related text) and update of the source code file to the server-side source control repository (paragraph [0012] “... any file modified or manipulated by the client while disconnected ... uploaded to the server when the client regains its connection to the server ...”);

wherein one of the client-side client source code control component or the server-side server source code control component checks for an error during the update process (see at least paragraph [0158] “... error cases... if a directory is being deleted and it has descendent... will

fail...”) and determines whether the update can proceed or must be aborted in part or whole (see at least paragraph [0165] “... FALSE if some error was encountered... operation was aborted...” and paragraph [0238] “... incomplete conversion is not an error condition...” and paragraph [0304]).

Per claim 3 (Currently Amended), Lin discloses the client system of claim [[2]]1, the source code file stored in the cache remains in an unmodified state (in paragraph [0071] “... writes are cached until the op-lock is broken ...”).

Per claim 4 (Currently Amended), Lin discloses the client system of claim [[2]]1, contents of the cache are maintained in both the offline mode and online mode of the client (in paragraph [0086] “... cache can be stored in the cache while offline ...”).

Per claim 5 (Currently Amended), Lin discloses the client system of claim 1, wherein the client workspace stores all source code files that have been at least one of modified and deleted (e.g. TABLE 2 and related text).

Per claim 6 (Currently Amended), Lin discloses the client system of claim 1, wherein the client downloads the source code file from the server-side source control repository before the client moves to the offline mode (e.g. FIG. 12, step 1230 and related text).

Per claim 8 (Currently Amended), Lin discloses the client system of claim 1, wherein the file cache also stores at least one of pending change set data, a file type definition, and a site-specific help file (e.g. FIG. 4 and related text).

Per claim 9 (Currently Amended), Lin discloses the client system of claim 1, wherein an error is resolved during a reconciliation process of the activity to the source code file before the source code file can be updated with the modification (paragraph [0070] "... error is returned ...").

Per claim 11 (Currently Amended), Lin discloses the client system of claim 1, wherein the source code file is downloaded into a client workspace before the client moves to the offline mode (e.g. FIG. 11, step 1120 and 1130 and related text).

Per claim 12 (Currently Amended), Lin discloses the client system of claim 1, wherein a pristine copy of the source code file is automatically loaded into a client cache in response to a checkout-related command being executed (paragraph [0071] "... checks if there is any cached data from a previous write request on this file ... sends back the only sections with the modified data ..." e.g. FIG. 11, 1120 and related text).

Per claim 13, this is another system version of the claimed system discussed above (Claim 2), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Lin.

Per claim 14, this is another system version of the claimed system discussed above (Claim 3), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Lin.

Per claim 15, this is another system version of the claimed system discussed above (Claim 41), wherein all claim limitations have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, these claims are also anticipated by Lin.

Per claim 17 (Currently Amended), Lin discloses the client system of claim 13, wherein the activity is persisted to a server to update a server source code file associated with the source code file during an update process associated with the online mode (paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ..." and paragraph [0325] "... and e.g. FIG. 12, step 1210 and related text).

Per claim 20 (Currently Amended), Lin discloses the client system of claim [[13]]1, further comprising a classifier that automates a source code control feature by making an inference based on data associated with at least one of the online mode and an offline mode (paragraph [0033] "... classifiers can be employed ...").

Per claim 21 (Currently Amended), Lin discloses [[A]]In a network comprising a client system that facilitates course code control (e.g. FIG. 1 and related text), a computer program product for implementing a method of tracking and reconciling offline file editing and enforcing file security, the computer program product comprising one or more physical computer-readable storage medium-media having stored thereon computer-executable instructions that, when executed

by a processor, cause the client system to perform the following (paragraph [0007] "... online-offline...", [0008] "... the files to be cached to the local data store...", paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..."); ~~for performing a method of facilitating source code control, the method comprising~~

establishing a client workspace to store a plurality of source code files, the client workspace established to allow a user of the client to checkout a source code file for modification by the user and to store the source code file when modified (paragraph [0043] "... store them on a list...", [0045] "... while offline the CSC component can check the file access and share access rights...", [0071] "... op-lock is granted to the client..." and paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ...") and e.g. FIG. 2, 236 and related text);

downloading a copy of a remote source code file from a server source code control repository to the client workspace (paragraph [0007] "... online-offline...", [0008] "... the files to be cached to the local data store...", paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0034], paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ..." and paragraph [0325] "... and e.g. FIG. 12, step 1210 and related text), and transmits the activity during an update process when the client moves to an online mode and (e.g. FIG. 12, step 1230 and related text);

moving the client system to an offline mode (see at least paragraph [0011] "... state changes from online to offline...", paragraph [0036] "... underlined portion ... is offline while the remaining portions remain online..." and e.g. FIG. 5 and related text);

executing one or more commands to checkout the source code file in the client workspace for editing by the user, and in response to the checkout commands (paragraph [0007] "... online-offline..." and paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0034], paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ..." and paragraph [0325] "... and e.g. FIG. 12, step 1210 and related text), caching a pristine copy of the source code file in a client file cache, wherein the pristine copy is usable in the offline mode to facilitate undo and difference processes (see at least paragraph [0010] "... file access parameters including read/write capabilities can also be cached for offline use..." and e.g. FIG. 5 and related text);

modifying the source code file in the client workspace by executing one or more commands against the source code file paragraph [0007] "... online-offline..." and paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0034], paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ..." and paragraph [0325] "... and e.g. FIG. 12, step 1210 and related text);

storing activity data in an activity list, which activity data includes the one or more commands executed against the source code file (paragraph [0007] "... local client ... data store...", [0043] "... store them on a list..." and paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ..." and e.g. FIG. 2, 236 and related text);

moving the client system to online mode (see at least paragraph [0011] "... state changes from online to offline...");

performing an error check to determine if a security error exists (see at least paragraph [0158] "... error cases... if a directory is being deleted and it has descendent... will fail..."), including:

determining if the remote source code file is locked (see at least paragraph [0158] "... error cases... if a directory is being deleted and it has descendent... will fail..."); and
determining if an administrator has disallowed an update process see at least paragraph [0246] "... only user in admin group can do encryption or decryption...");

reconciling the activity data with the remote source code file by transmitting the activity data to the server to update the remote source code file if no security error is detected (see at least paragraph [0088] "... resolve synchronization conflicts...");

resolving any conflicts that occur during the reconciliation process (see at least paragraph [0012] "... useful when a conflict Exists... resolution may be needed..."); and

uploading the modified source code file to the server source code control repository when any conflicts have been resolved (see at least paragraph [0012] "... stored to the client's memory and then uploaded to the server...");

Per claim 28 (Currently amended), Lin discloses at a client system that facilitates source code control, a method of tracking and reconciling offline file editing and enforcing file security, the method, comprising acts of:

establishing a client workspace to store a plurality of source code files, the client workspace established to allow a user of the client to checkout a source code file for modification by the user and to store the source code file when modified (paragraph [0043] "... store them on a list...", [0045] "... while offline the CSC component can check the file access and share access rights...", [0071] "... op-lock is granted to the client..." and paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ..." and e.g. FIG. 2, 236 and related text);

downloading a copy of a remote source code file from a server source code control repository to the client workspace (paragraph [0034] "... cached copy of a file ..." paragraph [0007] "... online-offline...", [0008] "... the files to be cached to the local data store...", paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0034], paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ..." and paragraph [0325] "... and e.g. FIG. 12, step 1210 and related text), and transmits the activity during an update process when the client moves to an online mode and (e.g. FIG. 12, step 1230 and related text);

moving the client system to an offline mode (see at least paragraph [0011] "... state changes from online to offline...");

executing one or more commands to checkout the source code file in the client workspace for editing by the user, and in response to the checkout commands, caching a pristine copy of the source code in a client file cache, wherein the pristine copy is usable in the offline mode to facilitate

undo and difference processes; (paragraph [0007] "... online-offline..." and paragraph [0012] "... any file modified or manipulated by the client while disconnected from the remote server can be stored and uploaded to the server when the client regains its connection to the server ..." and paragraph [0034], paragraph [0084] "... user retains a consistent view of the file after transitioning online ... even when the files have been modified locally ..." and paragraph [0325] "... and e.g. FIG. 12, step 1210, FIG. 12, 1220 and related text);

storing activity data in an activity list, which activity data includes the one or more commands executed against the source code file (paragraph [0043] "... store them on a list..." and paragraph [0328] any modification or changes to the document can be saved or stored in the local cache ..." and e.g. FIG. 2, 236 and related text);

moving the client system to an online mode see at least paragraph [0011] "... state changes from online to offline...");

performing an error check to determine if a security error exists, including:
determining if the remote source code file is locked (see at least paragraph [0165] "... FALSE if some error was encountered... operation was aborted..." and paragraph [0238] "... incomplete conversion is not an error condition..." and paragraph [0304]), and
determining if an administrator has disallowed an update process (paragraph [0068] "... if the buffering state is at the equivalent of oplock..." and paragraph [0071] "... writes are cached until the op-lock is broken ..." and paragraph [0268] "... if it is error success...");

reconciling the activity data with the remote source code file by transmitting the activity data to the server to update the remote source code file if not security error is detected (paragraph [0242] "... true if no error encountered ..." and e.g. FIG. 12, 1230 and related text),

resolving any conflicts that occur during the reconciliation process (see at least paragraph [0012] “... useful when a conflict Exists... resolution may be needed...”); and uploading the modified source code file to the server source code control repository when any conflicts have been resolved (see at least paragraph [0012] “... stored to the client’s memory and then uploaded to the server...”).

Per claim 29, Lin discloses the method of claim 28, further comprising storing information at the client before entering the offline mode (e.g. FIG. 12, 1230 and related text).

Per claim 30, Lin discloses the method of claim 28, further comprising updating a checkout record at the server during the online mode (e.g. FIG. 13, 1310 and related text).

Per claim 31, Lin discloses the method of claim 28, further comprising issuing a command to enter the offline mode, and a corresponding command to enter the online mode (e.g. FIG. 12, 1230 and e.g. FIG. 13, 1310 and related text).

Per claim 32, Lin discloses the method of claim 28, further comprising issuing a command that includes a URL to a workspace (e.g. FIG. 13 and related text).

Per claim 33 (Currently Amended), Lin discloses the method of claim 28, further comprising : checking out a source code file during the act of downloading, which is during the online mode; (paragraph [0071] “... checks if there is any cached data from a previous write request on this file ... sends back the only sections with the modified data ...” e.g. FIG. 11, 1120 and related text).

Per claim 34, Lin discloses the method of claim 28, further comprising: detecting an error during the offline mode (paragraph [0070] "... error is returned ..."); presenting an error message associated with the error (paragraph [0070] "... error is returned ..."); maintaining the client in the offline mode in response to detecting the error (paragraph [0093] "... viewing the offline store ..."); and allowing the client to move to the online mode after the error has been resolved (paragraph [0045] "... check the file access ... allow the request ...").

Per claim 35, Lin discloses the method of claim 28, further comprising imposing permissions required for the offline mode, during the online mode (paragraph [0045] "... check the file access ... allow the request ...").

Per claim 36, Lin discloses the method of claim 28, further comprising caching at the client at least one of unmodified files, pending change set information, file type definitions, and site-specific help files (e.g. FIG. 4 and related text).

Per claim 37 (Currently Amended), Lin discloses the method of claim 28, further comprising reapplying a checkout process to the server when at least one of the checkout was cancelled at the server when the client was offline and the checkout was performed offline on the client after the copy source code file was downloaded to the client without the checkout process issued to the server during the online mode (paragraph [0045] "... check the file access ... allow the request ...").

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAC T. TECKLU whose telephone number is (571) 272-7957. The examiner can normally be reached on M-TH 9:300A - 8:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Isaac T Tecklu/
Examiner, Art Unit 2192

/Michael J. Yigdall/
Primary Examiner, Art Unit 2192